

1. A moving walkway comprising:

a walkway surface having first and second ends and formed of a series of hinged rigid pallets in an endless loop;

a direction-reversing sprocket at each of the first and second ends;

5 each pallet being hinged to adjacent pallets along an axis substantially transverse to the walkway at opposite ends of the pallets along a length of the endless loop;

and each pallet being transversely subdivided into a plurality of parts, each of the pallet parts being unidirectionally hinged to an adjacent one of the plurality of parts such that each pallet will support vertical loads on the walkway surface as a rigid unit and will 10 hinge separately as the endless loop reverses direction around the sprockets.

2. The moving walkway of claim 1, wherein each unidirectional hinge has an axis of rotation situated below the walkway surface and each pallet part includes an abutment surface to abut a surface of the adjacent pallet part so as to provide a load-bearing connection therebetween and substantially prevent a downward deflection between 5 adjacent parts by a load on the walkway surface.

3. The moving walkway of claim 2, wherein each pallet part includes a substantially full width abutment surface along the edges between adjacent pallet parts at the unidirectionally hinged connection.

4. The moving walkway of claim 2, further comprising a unidirectional hinge connection between adjacent pallets.

5. The moving walkway of claim 4, further comprising main load-supporting bearings substantially outboard of the pallet and substantially adjacent hinged connections between the pallets.

6. The moving walkway of claim 1, wherein each pallet is subdivided into at least three parts.

7. The moving walkway of claim 6, wherein each unidirectional hinge has an axis of rotation situated below the walkway surface and each pallet part includes an abutment surface to abut a surface of the adjacent pallet part so as to provide a load-bearing connection therebetween and substantially prevent a downward deflection between adjacent parts by a load on the walkway surface.

8. The moving walkway of claim 1, further comprising main load-supporting bearings substantially outboard of the pallet and substantially adjacent hinged connections between the pallets.

9. The moving walkway of claim 8, wherein the main load-supporting bearings comprise wheels.

10. The moving walkway of claim 8, further comprising secondary load-supporting bearings on at least some pallets intermediate of the main load-supporting bearings.

11. The moving walkway of claim 10, wherein the secondary load-supporting bearings comprise wheels.

12. The moving walkway of claim 11, wherein the secondary load-supporting bearings are positioned inboard between side edges of the pallets.

13. The moving walkway of claim 10, wherein the secondary load-supporting bearings are positioned longitudinally between leading and trailing edges of at least some pallets.

14. The moving walkway of claim 13, further comprising a plurality of plate springs mounted between joints of corresponding adjacent pallet portions.